

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

SURGICAL INSTRUMENT SERVICE
COMPANY, INC.,

Plaintiff/Counter-Defendant,

v.

INTUITIVE SURGICAL, INC.,

Defendant/Counter-Claimant.

Case No. 3:21-cv-03496-VC

Honorable Vince Chhabria

**EXPERT REPORT OF AMANDEEP
MAHAL, MD**

Complaint Filed: May 10, 2021

Highly Confidential – Subject to Protective Order

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I. QUALIFICATIONS

1. I am a board-certified obstetrician and gynecologist. I am also a board-certified female pelvic medicine and reconstructive surgeon, commonly referred to as a Urogynecologist. I am currently practicing medicine in Omaha, Nebraska.

2. I attended Creighton University School of Medicine and graduated with my medical degree in 2010. I completed residency training in obstetrics and gynecology at the University of Iowa in 2014. I completed my fellowship training in urogynecology at Stanford University in 2017. I also completed additional training through the American College of Surgeons in fundamentals of laparoscopic skills.

3. I have received numerous accolades and awards as a result of my work in the medical field, such as best research awards at national meetings, grant awarded research, and work as a sub-investigator on pivotal trials. I hold several memberships to professional medical organizations including the American College of Obstetricians and Gynecologists, American Urologic Association, American Urogynecology Society, and the Society for Clinic Research Sites. I have authored or co-authored numerous publications in national peer-reviewed journals, including Menopause, Female Pelvic Medicine and Reconstructive Surgery, and the American Journal of Obstetrics and Gynecology. I have also presented my findings at several national meetings of pelvic floor surgeons, such as American Urogynecologic Society, American Urologic Association and Society for Gynecologic Surgeons. I have held multiple teaching positions, including adjunct teaching positions with Creighton School of Medicine and University of Nebraska.

4. I began my surgical career with traditional (open) and laparoscopic surgical techniques, both of which I still currently employ. Throughout my training and career, I have been

exposed to, developed, and routinely apply surgical skills in open and laparoscopic techniques for a variety of surgical procedures, such as reconstructive pelvic surgery.

5. Beginning in 2010, I started utilizing Intuitive's da Vinci robotic surgical systems in surgical procedures, using the S and Si models at that time. I underwent training through online course work from Intuitive for safety. I have participated in several masters courses for surgery including robotic surgery, and further including hands-on courses at Intuitive headquarters in Sunnyvale, California as part of my training. Since 2010, I have performed over 1,000 robotic-assisted surgeries using various Intuitive da Vinci surgical systems including the S, Si, X, and Xi models. Examples of da Vinci robotic-assisted surgeries I have performed include hysterectomies, bladder fistula repair, prolapse repairs including uterosacral suspensions, hysteropexies and sacrocolpopexy.

6. I currently practice medicine at a private surgery center where I am an owner and partner along with other practicing urologists and urogynecologists. On average I perform 100 to 150 surgeries in a year using Intuitive's da Vinci robotic surgical systems. I hold teaching positions at the University of Nebraska Medical Center as faculty in the departments of Urology and Obstetrics and Gynecology. Through my teaching roles I oversee and instruct gynecology and urology residents on patient selection, appropriate use, set up, and surgical use with da Vinci robotic surgery.

7. Currently I hold the office of American Medical Association Nebraska alternate delegate for proceedings of the AMA. Through my position at the American Medical Association, I routinely contribute to the advocacy council on public safety.

8. A copy of my current *Curriculum Vitae* is attached to this Report at Attachment 1.

eliminating or greatly decreasing a surgeon's need to compensate for this unique challenge of traditional laparoscopy.

- f. The optic lenses of a da Vinci system offer a magnified or "zoomed-in" view for better visualization. Combined with the increased precision due to scaled movement of a da Vinci robot arm and instruments – for example, a three-inch movement of the controls at the surgeon's console may move the instrument one inch – a surgeon has improved fine motor control relative to laparoscopic surgery.

35. In addition to the above-stated functional differences and advantages of da Vinci system, in a da Vinci surgery I can safely perform complex procedures with less skilled or experienced operating room assistants, who are not required to hold instruments or cameras during the operation.

36. In view of its advantages, da Vinci surgery has become so popular in training and in practice, it is now a standard of care for many procedures. For example, a retrospective study published in the *Journal of the American Medical Association* ("JAMA") showed that robotic surgery may represent almost one out of five general surgery procedures in the state of Michigan.³

37. da Vinci surgery has become a staple and essential for many surgeons. As robotic surgery has become more prevalent at many training centers in the United States, many doctors find that they require a da Vinci system to consistently complete surgeries safely. Many smaller hospital systems have at least one da Vinci system, as most surgeons who perform minimally invasive surgery would not consider working in a facility that was not able to perform a da Vinci

³ Sheetz et al., *Trends in the Adoption of Robotic Surgery for Common Surgical Procedures*, *Journal of American Medicine*, Jan. 10, 2020, <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2758472>.

surgery. This is particularly true for surgeons who entered the profession within the last 15-20 years. For example, in rural Nebraska where I practice, many smaller hospitals obtain da Vinci systems to recruit and retain general surgeons.

38. Even though I am adept at traditional laparoscopy, there are surgeries that I would only perform with da Vinci surgery. For example, while sacrocolpopexy surgery can be performed laparoscopically, dissection over the great vessels and delicate internal structures such as the ureters is safer with the more precise movement and better optics afforded by the da Vinci system. Over the past three years none of the sacrocolpopexy surgeries I performed was done using traditional laparoscopy for these reasons.

39. In my experience, when comparing laparoscopic to da Vinci surgery, surgeons are primarily interested in the safety of the patient and the relative difficulty of performing procedures, and are generally less concerned with the costs of the surgical procedure to the patient or hospital. Surgeons are generally unaware of the costs of particular procedures, or the relative cost of a laparoscopic procedure versus a da Vinci surgery.

40. In my experience, surgeons who are trained to perform da Vinci surgeries have the ability to request that surgeries are performed with da Vinci systems rather than using traditional laparoscopy. Surgeons in fact regularly demand that a da Vinci system is made available to perform particular surgeries, and in my experience hospitals acquiesce to such demands. Some surgeons may even delay a case or schedule cases at odd times in order to gain access to a da Vinci system rather than performing the procedure laparoscopically.

41. Based on my conversations with patients and my general understanding from others in the profession, patients consider whether hospitals are keeping up with current trends in technology and medicine when deciding on care. With each passing year, robotic surgery becomes